

## WHAT IS CLAIMED IS:

1. A human epidermal and/or hair treatment composition comprising an admixture of (i) a plurality of microcapsules each of which (a) has an outside diameter in the range of from about 0.01 to about 1000 microns; (b) has a wall having a thickness in the range of from about 0.001 to about 100 microns and has a core comprising a liquid selected from the group of fragrances, solvents, malodor counteractant compositions, beneficial agents and mixtures of fragrance, solvent, malodor counteractant compositions and beneficial agents, wherein greater than about 50 weight percent of the liquid has a  $C \log_{10}P$  of from about 1.5 to about 8.0; and wherein the solvent composition (A) is compatible with said fragrance composition and/or said malodour counteractant composition and (B) has a  $C \log_{10}P$  greater than about 2.0 wherein P represents the n-octanol/water partition coefficient for each of said fragrance composition components and/or said malodour counteractant composition components and P' represents the n-octanol/water partition coefficient for each of said solvent components and (ii) a human epidermal skin treatment and/or hair treatment base for maintaining in suspension said plurality of microcapsules, selected from the group consisting of a gel base, a suspension, a powder and an emulsion base, the concentration of fragrance composition components and/or malodour counteractant composition components in said human epidermal and/or hair treatment composition being in the range of from about 0.1 to about 50.0% by weight of said human epidermal and/or hair treatment composition.
2. A human epidermal composition of claim 1 wherein the range of weight percent of fragrance composition components and/or malodour counteractant composition components in said microcapsules being from about 5 % to about 98 % by weight of filled microcapsules; and the range of weight percent of solvent in said plurality of microcapsules being from about 10% to about 90% by weight of said microcapsules.
3. A human epidermal and/or hair treatment composition of claim 1 comprising an admixture (i) of microcapsules having (a) an outside diameter in the range of from about 0.01 to about 1000 microns; (b) a wall having a thickness in the range of from about 0.001 to about 100 microns; (c) a wall composed of a substituted or un-substituted acrylamide-acrylic acid copolymer cross-linked with a melamine-formaldehyde and/or a urea-formaldehyde pre-condensate; and (d) has a liquid phase core selected from the group consisting of a fragrance

composition, a malodour counteractant composition, a beneficial agent and mixtures of the components of which has a  $C \log_{10}P$  of from about 2.0 to about 8.0 and a solvent composition of the components of which (A) is compatible with the components of said fragrance composition, said malodour counteractant or beneficial agent composition and (B) has a  $C \log_{10}P$  greater than about 2.0 wherein P represents the n-octanol/water partition coefficient for said fragrance composition components and/or said malodour counteractant composition components and P represents the n-octanol/water partition coefficient for each of said solvent components and (ii) a human epidermal skin treatment and/or hair treatment base for maintaining in suspension said plurality of microcapsules, selected from the group consisting of a gel suspension, powder and an emulsion base, the concentration of fragrance composition components and/or malodour counteractant composition components in said human epidermal and/or hair treatment composition being in the range of from about 0.1 to about 50.0% by weight of said human epidermal and/or hair treatment composition; the range of weight percent of fragrance composition components and/or malodour counteractant composition components in said plurality of microcapsules being from about 5% to about 98% by weight of filled microcapsules; and the range of weight percent of solvent in said plurality of microcapsules being from about 10% to about 90% by weight of filled microcapsules.

4. The human epidermal and/or hair treatment composition of claim 1 wherein each of the microcapsules has an average diameter is the range of from about 0.05 microns to about 100 microns and an average wall thickness in the range of from about 0.005 microns to about 10 microns.
5. The human epidermal and/or hair treatment composition of claim 1 wherein each of the rupturable microcapsules has an average diameter is the range of from about 2.0 microns to about 15 microns and an average wall thickness in the range of from about 0.2 microns to about 2.0 microns.
6. The human epidermal and/or hair treatment composition of claim 1 wherein the components of the hydrophobic solvent composition has a  $C \log_{10}P$  greater than about 8.

7. The human epidermal and/or hair treatment composition of claim 1 wherein the solvent is selected from the group consisting of a mono-, di- or tri-C<sub>4</sub>-C<sub>26</sub> saturated or unsaturated fatty acid glyceride, diethyl phthalate, dibutyl phthalate, diisodecyl adipate, a liquid polydimethyl siloxane, a liquid polydimethylcyclsiloxane, the methyl ester of soya fatty acid, a mixture of soya fatty acid methyl ester and isopropyl myristate with the weight ratio of soya fatty acid:isopropyl myristate being from 2:1 to 20:1 and a mineral oil compatible with each component of said fragrance composition and/or said malodour counteractant composition.
8. The human epidermal and/or hair treatment composition of claim 7 wherein the hydrophobic solvent is the tri-glyceride ester of a mixture of caprylic acid and capric acid.
9. The human epidermal and/or hair treatment composition of claim 1 wherein at least a fraction of said plurality of microcapsules are coated with a cationically-charged polymer and/or a non-ionic polymer.
10. The human epidermal and/or hair treatment composition of claim 1 wherein at least a fraction of said plurality of microcapsules, the walls of which are cured at a temperature of from 50°C to about 85°C.
11. The human epidermal and/or hair treatment composition of claim 1 wherein the average outside diameter of each of the microcapsules is from about 0.05 microns to about 100 microns.
12. The human epidermal and/or hair treatment composition of claim 1 wherein the aqueous human epidermal skin and/or hair treatment base is a gel base having a pH in the range of from about 4.5 to about 9, comprising water, at least one suspending agent, at least one gelling agent, at least one pH buffering agent and at least one moisturizer.
13. The human epidermal and/or hair treatment composition of claim 1 wherein the aqueous human epidermal skin and/or hair treatment base is an emulsion base having a pH in the range of from about 4.5 to about 9, comprising water, at least one suspending agent, at least one pH buffering agent, at least one emulsifier, at least one emulsion stabilizer and at least one moisturizer.

14. The human epidermal and/or hair treatment composition of claim 12 wherein the suspending agent is a solid suspending agent selected from the group consisting of xanthan gum, guar gum, attapulgit clay, hydroxypropyl cellulose having a molecular weight of from about 50,000 to about 800,000, colloidal silica, and ethyl cellulose having a particle size of from about 0.004 to about 0.130 microns, a surface area of from about 100 to about 500 m<sup>2</sup> per gram and a density of from about 1.0 to about 4.0 pounds per cubic foot.
15. The human epidermal and/or hair treatment composition of claim 13 wherein the suspending agent is a solid suspending agent selected from the group consisting of xanthan gum, guar gum, attapulgit clay, hydroxypropyl cellulose having a molecular weight of from about 50,000 to about 800,000, colloidal silica, and ethyl cellulose having a particle size of from about 0.004 to about 0.130 microns, a surface area of from about 100 to about 500 m<sup>2</sup> per gram and a density of from about 1.0 to about 4.0 pounds per cubic foot.
16. The human epidermal and/or hair treatment composition of claim 12 wherein the gelling agent is a polymer of acrylic acid cross-linked with an allyl ether of sucrose.
17. A process for treating a given region of the human epidermis and/or human hair comprising the step of applying to said given region of the human epidermis and/or hair a human epidermis and/or hair treating quantity of the composition of claim 1 over a human epidermis and/or hair treatment period of time.
18. The process of claim 16 wherein the intensity of fragrance evolved from the microcapsules applied to the human epidermis or hair follicles as a result of the application of the human epidermal and/or hair treatment composition, as a function of time, is in accordance with the algorithm:

$$Y = A \text{ Log }_e X + B$$

wherein Y is a scaled measure of fragrance intensity on a scale of 0 – 20 and X is time as measured in hours subsequent to the application of the human epidermal and/or hair

treatment composition; and wherein A is in the range of from -3.0 to -8.0 and B is in the range of from 22 to 26.

19. The human epidermal and/or hair treatment composition of claim 1 wherein the plurality of microcapsules has a wall composed of an unsubstituted acrylamide-acrylic acid copolymer having a molecular weight in the range of from 5,000 to 1,000,000 cross-linked with a melamine-formaldehyde pre-condensate, wherein the mole ratio of acrylic acid monomeric units:acrylamide monomeric units is from 9:1 to 1:9 and wherein the mole ratio of melamine-formaldehyde precondensate cross-linking agent:acrylamide-acrylic acid copolymer is in the range of from 9:1 to 1:9.
20. The human epidermal and/or hair treatment composition of claim 19 wherein the mole ratio of acrylic acid monomeric units:acrylamide monomeric units is from 7:3 to 3:7.
21. The human epidermal and/or hair treatment composition of claim 19 wherein the mole ratio of melamine-formaldehyde precondensate cross-linking agent:acrylamide-acrylic acid copolymer is in the range of from 5:1 to 1:5.
22. The human epidermal and/or hair treatment composition of claim 21 wherein the mole ratio of melamine-formaldehyde precondensate cross-linking agent:acrylamide-acrylic acid copolymer is in the range of from 2:1 to 1:2.
23. The human epidermal and/or hair treatment composition of claim 19 wherein the unsubstituted acrylamide-acrylic acid copolymer has a molecular weight in the range of from 10,000 to 100,000.
24. The human epidermal and/or hair treatment composition of claim 1 wherein the aqueous human epidermal skin and/or hair treatment base comprises ethanol, at least one suspending agent and water.

- 25 A method for treating a given region of the human epidermis and/or hair comprising the step of applying to said given region of the human epidermis and/or hair a human epidermis and/or human hair treating quantity of the composition of claim 24 over a human epidermis and/or human hair treatment period of time.